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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,544	10/16/2000	Kenneth W. Aull	15-0216	2602

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EXAMINER

PERUNGAVOOR, VENKATANARAY

ART UNIT PAPER NUMBER

2132

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/690,544	Applicant(s) AULL ET AL.	
	Examiner Venkatanarayanan Perungavoor	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 18, filed 2/11/2005, with respect to Claim 63-66 and Claim 61 have been fully considered and are persuasive. The Claim objections of Claim 63-66 and Claim 61 has been withdrawn.
2. Applicant's arguments, see page 18, filed 2/11/2005, with respect to the rejection(s) of claim(s) 1-10, 29-41, 60-62, under 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent 5,659,616 to Sudia.
3. Applicant's arguments with respect to Claims 2-6, 10, 33-37, and 41 is not persuasive. Wesley does suggest of a role certificate, he teaches of the manner in which a node can participate in an multicast session see Col 2 Line 66-Col 3 Line 5. And further the teaching of extensions and at least one policy is met by Col 4 Line 22-27.
4. Applicant's arguments with respect to Claims 8 and 39, Vaeth discusses the retrieving of message.
5. Applicant's arguments with respect to Claim 9 and 40, see discussion below.

6. Applicant's arguments with respect to Claim 11,17 and 42, 48 are not persuasive.

Koehler does disclose an role certificate used by a group whereby they can encrypt and decrypt information see Col 3 Line 1-11. Koehler teaches of both revoking and renewing see Col 3 Line 11-19 & Line 25-30. And further applicant's argument regarding Claim 17 and 48, Koehler does teach of an registration and certification see Col 2 Line 51-55.

7. Applicant's argument with respect to Claim 12,13 and 43, 44 are not persuasive see discussion below.

8. Applicant's arguments with respect to Claim 16, 21, 24, 28, 52, 55 and 59 are not persuasive as Koehler teaches of extensions and at least one policy(issuer and user privileges) see Col 6 Line 5-8.

9. Applicant's arguments with respect to Claim 18 and 49 is not persuasive, as Koehler discloses the removal of certificate see Col 3 Line 11-33.

10. Applicant's arguments with respect to Claims 15, 19, 22, 23, 25, 26, 29, 30, 31, 46, 47, 50, 53, 54, 56, 57, 60, 61, 62, 63, 66, are discussed below.

Claim Rejections 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

12. A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claim 11-14, 16, 21, 24-28, 42-45, 47-51, 52-53, 55 and 58-59, 63-66 rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6301658 B1 to Koehler.

14. Regarding Claim 11 and 42, Koehler discloses the role certificate where a role is selected from a list which is about to expire and replacing it with a new certificate having private and public keys see Col 3 Line 11-33; the transmitting of certificate is disclosed by Koehler see Col 3 Line 4-7. Koehler further discloses the use of role certificate as group stamp see Col 3 Line 1-4 and for encryption of information and decryption(authenticated) by group members see Col 4 Line 23-32.

15. Regarding Claim 12 and 43, Koehler discloses the transmitting of new role certificate to the user over encrypted secure communication line is met see Col 2 Line 39-50 & 7-15.

16.Regarding Claim 13 and 44, The "prior to the transmitting of the new role certificate to the user, the new role certificate is transmitted to a certificate authority for approval, and the new role certificate is not transmitted to the user without the approval" is met by Koehler see Col 3 Line 45-48 & Col 3 Line 50-60.

17.Regarding Claim 14 and 45, The "public key portion of the role certificate is stored on a server for access by individuals and entities outside of the group" is met by Koehler see Col 2 Line 19-25.

18.Regarding Claim 16, 21, 24, 28, 47, 52, 55 and 59, The "role certificate comprises a public key, a private key, a signature algorithm ID, a validity period, extensions and at least one policy" is met by Koehler see Col 4 Line 66- Col 5 Line 5 & Col 6 Line 5-8.

19.Regarding Claim 17 and 48, The "transmitting a signature certificate to a registration web server by a user, authenticating by accessing a directory that the user is still a member of the organization, listing roles of which the user is a role member or a role authority, and removing the role certificate associated with the role from a directory database" is met by Koehler see Column 3 Line 12-19 & Column 3 Line 25-30.

20. Regarding Claim 18 and 49, The "role certificate is removed from the directory database the role associated with the role certificate remains intact on the database" is met by Koehler see Column 3 Line 27-30.

21. Regarding Claim 19 and 50, Koehler discloses "generating a new role certificate for the role when the role certificate is removed from the directory database" see Column 4 Line 2-6, "establishing a secure encrypted communications line with the user; and transmitting the role certificate to the user" see Column 1 Line 62-65.

22. Regarding Claim 20 and 51, Koehler discloses updating the members on the list, which includes that which have been removed and new one that have been created see Column 3 Line 61-column 4 Line 6.

23. Regarding Claim 22 and 53, Koehler discloses the recovery of an expired certificate via a timestamp cache which updates the old item see Col 4 Line 17-40, transmitting a request to recover expired certificate digitally signing with role certificate and decrypting see Col 2 Line 5-15. And Koehler discloses that an list that contains role members see Column 3 Line 11-13. And further, Koehler discloses contacting authority for copy of the role certificate see Column 4 Line 7-12 and transmitting the certificate Column 2 Line 23-25. Koehler further discloses the use of role certificate as group stamp see Col 3 Line 1-4 and for encryption of

information and decryption(authenticated) by group members see Col 4 Line 23-32.

24.Regarding Claim 25, Koehler discloses the publishing of a list describing of recent timestamps which would suggest to include the recovered certificates see Col 4 Line 36-40.

25.Regarding Claim 26 and 57, Koehler discloses transmitting an request to revoke an role and its digital certificate that contains the signature see Column 6 Line 56-62. Koehler discloses searching an list for all role certificates of an sole see Column 8 Line 28-31.Koehler discloses having an list of role certificates that have been revoked and selecting an role certificate to be removed and deleting it from the list see Column 3 Line 25-30. Koehler further discloses the use of role certificate as group stamp see Col 3 Line 1-4 and for encryption of information and decryption(authenticated) by group members see Col 4 Line 23-32.

26.Regarding Claim 27 and 58, Koehler discloses of deleting from a list the role certificate and role from the list see Col 3 Line 11-33.

27.Regarding Claim 63, Koehler discloses the public and private keys, signature algorithm ID, a validity period, extensions and policy see Col 4 Line 66- Col 5 Line 5 & Col 6 Line 5-8.

28. Regarding Claim 64, Koehler discloses the decrypting of encrypted information see Column 1 Line 63-66. And Koehler discloses the digital signature given by an authority on behalf of an organization or group see Column 5 Line 14-20.

29. Regarding Claim 65, Koehler discloses that a certificate is given to each role member and that a role member receives certificates that are particular to his/her group only with certain defined roles and a role member can't access the roles see Column 2 Line 55-67.

30. Regarding Claim 66, Koehler discloses verifying the certificate and including of information by the authority whereby the information is a digital signature see Column 5 Line 17-20.

Claims Rejection 35 USC § 103

31. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

32. Claim 1, 3-9, 32, 34-40 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,308,277 B1 to Vaeth et al.(hereinafter Vaeth) in view of U.S. Patent 5,659,616 to Sudia.

33. Regarding Claim 1 and 32, Vaeth discloses "transmitting a role approval form, filled out and digitally signed by the user using a personal digital signature, to at least one personal role approval, signing digitally the role approval form by the personal role approval using a personal digital signature, creating a role certificate upon receipt of the role approval form signed by the user and the personal role approval, notifying the user of the availability of the role certificate, and transmitting the role certificate to the user" see Column 4 Line 34- Line 54. But Vaeth does not disclose the use of group stamp and further the use of role certificate for encryption of information. However, Sudia discloses the use of group stamp and the use of role certificate for encryption of information see Col 7 Line 26-34. It would be obvious to one having ordinary skill in the art at the time of the invention to include the use of group stamp and the use of role certificate for encryption of information of Sudia's in the invention of Vaeth in order to be used outside of the system as taught in Sudia see Col 7 Line 20-25.

34. Regarding Claim 3 and 34, The policy indicates all permitted uses and limitations on the role certificate" is met by see Sudia Col 7 Line 36- Col 9 Line10. It would be obvious to one with ordinary skill in the art at the time of the invention to

include the policy of Sudia in Vaeth in order to restrict access to sensitive information see Col 7 Line 53-55.

35. Regarding Claim 4 and 35, The "identifying all members of a group as role members that will access and use the role certificate, storing the names and identifications of all role members, and transmitting copies of the role certificate to all role members" is met by Vaeth et al. see Column 4 Line 38-44 & Column 4 Line 58-61.

36. Regarding Claim 5 and 36, The "transmitting the public key portion of the role certificate to a plurality of entities outside the group; and decrypting messages from the plurality of entities outside the group encrypted using the public key portion of the role certificate" is met by Vaeth et al. see Column 3 Line 42-47.

37. Regarding Claim 6 and 37, The "signing electronic forms by a group member utilizing the role certificate; and transmitting electronic forms to entities outside the group" is met by Vaeth et al. see Column 4 Line 44-49.

38. Regarding Claim 7 and 38, The "filling out an electronic form by a role member of the plurality of role members of the group; signing digitally the electronic form by the role member using the role certificate; signing digitally the electronic form by the role member using a personal signature certificate; and transmitting the

electronic form to an entity" is met by Vaeth et al. see Column 4 Line 34- Line 54.

But Vaeth does not disclose the use of group stamp and further the use of role certificate for encryption of information. However, Sudia discloses the use of group stamp and the use of role certificate for encryption of information see Col 7 Line 26-34. It would be obvious to one having ordinary skill in the art at the time of the invention to include the use of group stamp and the use of role certificate for encryption of information of Sudia's in the invention of Vaeth in order to be used outside of the system as taught in Sudia see Col 7 Line 20-25.

39. Regarding Claim 8 and 39, The "retrieving a policy associated with the role certificate by the entity, and determining if the role certificate signature supplied is valid as a signature for the electronic form" is met by Vaeth et al. see Col 2 Line 65- Col 3 Line 1 & Column 3 Line 26-34.

40. Regarding Claim 9 and 40, The transmitting of keys, encrypting of information by entity, transmitting of information to a plurality of role members and decrypting information by a plurality of role members is disclosed by Vaeth see Column 3 Line 35-47.

41. Claim 2-6, 10, 33 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6308277 B1 to Vaeth et al. in view of U.S. Patent No. 6275859 B1 to Wesley et al.
42. Regarding Claim 2, 10, and 33, Vaeth et al. does not disclose role certificate comprises public key, a private key, a signature algorithm ID, a validity period, extensions and at least one policy. However Wesley et al. discloses the use of public key, a private key, a signature algorithm ID, a validity period, extensions and policies and identifier of the roles see Column 4 Line 18-Line 27. It would be obvious to one having ordinary skill in the art at the time of the invention to include to role certificate a public key, a private key, a signature algorithm ID, validity period, extensions and at least one policy in order to provide identities and authorization to participate in session see Column 3 Line 6-Line 9 & Col 3 Line 52-62.
43. Claim 15, 46 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6301658 B1 to Koehler in view of U.S. Patent 6308277 B1 to Vaeth et al.
44. Regarding Claim 15 and 46, Koehler does not disclose the "private key portion of the role certificate is stored in a key recovery authority". However Vaeth et al. discloses the storage of private keys see Column 8 Line 13-23. It would be obvious to one having ordinary skill in the art at the time of the invention to

include an storage of private keys for recovery in order for them to be accessed by other networks or special hardware and software see Column 8 Line 23-28.

45. Claim 23, 54 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent 6,301,658 B1 to Koehler in view of U.S. Patent 6,275,859 B1 to Wesley et al.(hereinafter Wesley).

46. Regarding Claim 23 and 54, Koehler does not disclose authenticating that the role member is either a member of the role or a role authority for the role prior to contacting the key recovery authority. However, Wesley et al. discloses verifying of role prior to the contacting repair nodes see Column 3 Line 6-20. It would be obvious to one having ordinary skill in the art at the time of the invention to modify verifying of role prior to the contacting repair node to contacting recovery authority in order operation to be performed before session not during active session and thus increasing latency see Column 4 Line 12-14.

47. Claim 29, 30, 60, 61 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,487,658 B1 to Micali in view of U.S. Patent 5,659,616 to Sudia.

48. Regarding Claim 29 and 60, Micali discloses identifying an role certificate to be recovered and searching to find whether the role is still valid; transmitting a request for approval by recovery agent and receiving an approval, transmitting

the role certificate to user see Column 25 Line 20-34. The transmitting of role certificate to an agent is disclosed by Micali see Column 24 Line 67-Column 25 Line 6. But Micali does not disclose the use of group stamp and further the use of role certificate for encryption of information. However, Sudia discloses the use of group stamp and the use of role certificate for encryption of information see Col 7 Line 26-34. It would be obvious to one having ordinary skill in the art at the time of the invention to include the use of group stamp and the use of role certificate for encryption of information of Sudia's in the invention of Micali in order to be used outside of the system as taught in Sudia see Col 7 Line 20-25.

49. Regarding Claim 30 and 61, Micali discloses the need for both agents to agree in order for certificate to be recovered see Col 25 Line 37-49.

50. Claim 31, 62 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,487,658 B1 to Micali in view of U.S. Patent 5,659,616 to Sudia and further in view of U.S. Patent 6,275,859 B1 to Wesley et al. (hereinafter Wesley)

51. Regarding Claim 31 and 62, Micali does not disclose agents being authenticated prior to the role certificate being sent to the recovery agent. However, Wesley et al. discloses verifying of role prior to the contacting repair node see Column 4 Line 3-6 & Column 4 Line 15-17. It would be obvious to one having ordinary skill in the art at the time of the invention to modify verifying of role prior to the

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contacting repair node to recovery authority in order operation to be performed before session not during active session and thus increasing latency see Column 4 Line 12-14.

Conclusion

52. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

53. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Venkatanarayanan Perungavoor whose telephone number is 571-272-7213. The examiner can normally be reached on 8-4:30.

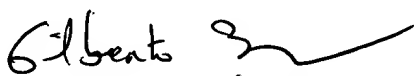
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54. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP Venkatanarayanan Perungavoor
Examiner
Art Unit 2132

VP
4/19/2005


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